IN THE CLAIMS:

1.   (Previously Presented) An apparatus for upgrading the program stored in a firmware board comprising:

a host computer for converting an execution file prepared by an operator into a file for a production;

a flash memory disposed in the firmware board for storing a production-processing program;

a personal computer (PC) for receiving the production file downloaded from the host computer and for storing the downloaded file in a corresponding region of the flash memory; and

a DRAM for storing a copy of the production-processing program from the flash memory when upgrading the production-processing program so that the upgrading can be performed in the DRAM;

wherein the PC stores the production file in the flash memory using the production-processing program in the flash memory.

2.   (Original) The apparatus as claimed in Claim 1, further comprising an RS232C line for connecting the PC to the firmware board.

3.   (Canceled)

4.   (Original) The apparatus as claimed in Claim 1, wherein the PC transmits the production file to the flash memory when a transmission command is inputted thereto.

5. – 6. (Canceled)

7.   (Previously Presented) The apparatus as claimed in Claim 1, wherein the upgraded production-processing program in the DRAM is transferred back to the flash memory.

8.   (Currently Amended) An apparatus for upgrading the operation system firmware of a personal computer system by downloading an updated firmware to acquire new capabilities, comprising:

a host computer for converting an execution file prepared by an operator into said updated firmware;

at least one personal computer coupled to said host computer for receiving said new firmware downloaded from said host computer;

a firmware board having:

a communication interface means connected for communicating with said personal computer and for transferring data between said personal computer and said firmware board;

a first memory means coupled to said communication means for storing a boot program, operating codes, and said operating system firmware; and

a second memory means coupled to said first memory means for storing a copy of information stored in said first memory means to be replaced with said updated firmware;

wherein said personal computer is further operable for ~~storing~~transmitting to the firmware board said updated firmware downloaded from said host computer and wherein, based on an analysis of the transmitted firmware by a production-processing program in said first memory means, the production-processing program operates in either the first or second memory means in storing the transmitted firmware into a corresponding region of said first memory means; ~~and~~

~~wherein the replaced updated firmware in said second memory means is transferred back to the corresponding region of said first memory means.~~

9. – 10.   (Canceled)

11.   (Previously Presented) The apparatus as claimed in Claim 8, wherein said

3

second memory means comprises a Dynamic Random Access Memory (DRAM) or a Static Random Access Memory (SRAM).

12.   (Original) The apparatus as claimed in Claim 8, wherein said first memory means comprises a flash memory, and wherein said communication means comprises an RS232C line.

13.   (Previously Presented) The apparatus as claimed in Claim 8, wherein said host computer is further operable for attaching a storage address information of said first memory means to said updated firmware.

14.   (Currently Amended) A method for upgrading the program of a firmware board comprising the steps of:

providing a flash memory in the firmware board for storing a production-processing program;

creating, by a host computer, a file for a production by converting an execution file prepared in advance into the file for production;

receiving the production file, by a personal computer (PC), downloaded from the host computer; and,

storing the production file in the corresponding region of the flash memory,

wherein the method further comprises the step of duplicating the production-processing program in an externally connected DRAM/SRAM while upgrading the production-processing program in the DRAM/SRAM, wherein the production file includes a header portion containing a storage address of the flash memory, a compression state, and a booting state for the production file.

15.   (Canceled)

16.   (Original) The method as claimed in Claim 14, wherein the PC transmits the file for production to the flash memory when a transmission command is inputted thereto.

17. – 24.   (Canceled)

25.   (Previously Presented) The apparatus as claimed in Claim 8, said apparatus being configured to replace said copy of information with said updated firmware.

26.   (New) The apparatus as claimed in Claim 1, wherein the host computer, prior to creation of the file for production, attaches a storage address of the flash memory, a compression state, and a booting state for the production file.